

AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of manufacturing a crystal resonator using a crystal substrate, comprising the steps of:

forming a crystal resonator area and a side electrode shielding/formation blocks thereabout block on said crystal substrate through etching by leaving a partial connection section, and with both areas kept separate said crystal resonator area and said side electrode shielding/formation block being separated from each other with by a gap; and

applying vapor deposition through said gap diagonally toward the a side of said crystal substrate, producing an area where whereby a film is formed on said side and an in a first area where but film formation is prevented in a second area of said side due to by the existence of the said side electrode shielding/formation blocks block, and thereby forming an electrode film bisected in the thickness direction of the said substrate on the said side.

2. (Currently Amended) The method of manufacturing a small crystal resonator according to claim 1, wherein by adjusting the size of the said gap between said crystal resonator area and the said side electrode shielding/formation block, said side electrode shielding/formation block is constructed of in an area where said bisected electrode film is formed and an area where formation of the said electrode film is prevented.

3. (Currently Amended) The method of manufacturing a small crystal resonator according to claim 1, wherein vapor deposition toward the said side of said crystal substrate is performed in a range of angle of incidence of $\pm 45^\circ$ to 55° with respect to the said side of the crystal substrate.

4. (Currently Amended) The method of manufacturing a small crystal resonator according to claim 1, wherein said electrode film is divided into upper and lower portions and is formed on the side of the a vibration section of the said crystal resonator.

5. (Currently Amended) The method of manufacturing a small crystal resonator according to claim 4, wherein $0.15t \leq d \leq 0.25t$ is held where t is the thickness of said vibration section and d is the distance between the two divided bisected electrodes on the said side of the , said side being on a tine for detection of Coriolis force.

6. (Currently Amended) The method of manufacturing a small crystal resonator according to claim 1,

wherein said crystal resonator is a quartz crystal tuning fork including a vibration section made up of a base and a plurality of vibration tines which extend from the said base, and wherein said electrode film is divided into upper and lower portions is formed on the said side , said side being a side of the said vibration section and the a side of the said base.

7. (Currently Amended) The method of manufacturing a small crystal resonator according to claim 1,

wherein said crystal resonator is a resonator for a vibration gyro having three vibration tines, and

wherein said electrode film is divided into upper and lower portions is provided on the said side of the ,said side being on a tine for detection of Coriolis force out of said three vibration tines.

8. (Original) The method of manufacturing a small crystal resonator according to any one of claims 1 to 7, wherein the thickness t of said crystal resonator is $100 \mu\text{m} \leq t \leq 350 \mu\text{m}$.

9. (Currently Amended) The method of manufacturing a small crystal resonator according to claim 1,

wherein said crystal resonator is a quartz crystal tuning fork including a vibration section made up of a base and a plurality of vibration tines which extend from ~~the~~ said base, and wherein part of said side electrode shielding/formation block is provided ~~so-as-to-insert~~ between said vibration tines.

10. (Previously Presented) A small crystal resonator created using the manufacturing method according to any one of claims 1 to 7 and 9.

11. (Previously Presented) A small crystal resonator created using the manufacturing method according to claim 8.